Amendments to the Claims:

Please amend claims 1, 12 and 20 as shown in the following listing of claims. This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) A system comprising:

a first station configured to transmit and receive ~~capable of transmitting and receiving~~ data modulated using a first modulation scheme;

a second station configured to transmit and receive ~~capable of transmitting and receiving~~ data modulated using a second modulation scheme;

an access point for communicating with the first and the second stations; and

wherein, the access point transmits a beacon frame indicating a beginning of a first period during which the first station is not allowed to contend for medium access, the first period being followed by a contention period during which the first station is allowed to contend for medium access, the beacon frame also indicating a location of a contention sub-period within the first period during which the second station is enabled to transmit data modulated according to the second modulation scheme following a distributed coordination function access mechanism.

2. (previously presented) The system of claim 1, wherein the first modulation scheme is a DSSS/CCK modulation scheme.

3. (previously presented) The system of claim 1, wherein the second modulation scheme is an OFDM modulation scheme.

4. (previously presented)The system of claim 1, wherein the contention sub-period occurs at the end of the first period.

5. (previously presented) The system of claim 1, wherein the access point dynamically adjusts the duration of the contention sub-period.

6. (previously presented) The system of claim 5, wherein the access point further adjusts the duration of the contention sub-period based on respective bandwidth requirements of the first and second stations.

7. (previously presented) The system of claim 5, wherein the access point further adjusts the duration of the sub-contention period based on respective numbers of devices using the first and the second modulation schemes.

8. (previously presented) The system of claim 1, wherein during the contention period, the second station sends a request-to-send frame comprising information representative of the second modulation scheme.

9. (previously presented) The system of claim 1, wherein during the contention sub-period, the second station transmits request-to-send and clear-to-send frames modulated according to the second modulation scheme.

10. (previously presented) The system of claim 1, wherein the second station sends an information field representative of the second modulation capability when joining the system.

11. (previously presented) The system of claim 1, wherein the system operates under the IEEE 802.11 specification.

12. (currently amended) An access point for communicating over a local area network with a first station configured to transmit and receive ~~capable of transmitting and receiving~~ data modulated according to a first modulation scheme and with a second station configured to transmit and receive ~~capable of transmitting and receiving~~ data modulated according to a second modulation scheme, wherein the access point transmits a beacon frame indicating a beginning of a first period during which the first station is not allowed to contend for medium access, the first period being followed by a contention period during which the first station is allowed to contend for medium access, the beacon frame also indicating a location of a contention sub-period within the first period during

which the second station is enabled to transmit data modulated according to the second modulation scheme following a distributed coordination function access mechanism.

13. (previously presented) The access point of claim 12, wherein the first modulation scheme is a DSSS/CCK modulation scheme.

14. (previously presented) The access point of claim 12, wherein the second modulation scheme is an OFDM modulation scheme.

15. (previously presented) The access point of claim 12, wherein the access point dynamically adjusts the duration of the contention sub-period.

16. (previously presented) The access point of claim 12, wherein during the contention period, the access point sends a request-to-send frame comprising information representative of the second modulation scheme.

17. (previously presented) The access point of claim 12, wherein during the contention sub-period, the access point transmits request-to-send and clear-to-send frames modulated according to the second modulation scheme.

18. (previously presented) The access point of claim 12, wherein during the contention period, the access point receives from the second station a request-to-send frame comprising information representative of the second modulation scheme.

19. (previously presented) The access point of claim 12, wherein the access point received from the second station an information field representative of the second modulation capability when the second station joins the local area network.

20. (currently amended) A first station in a local area network, the first station being configured to transmit and receive ~~capable of transmitting and receiving~~ data using a first modulation scheme, the local area network further comprising a second station configured to transmit and receive ~~capable of transmitting and receiving~~ data using a second modulation scheme and an access point for communicating with both stations, wherein the first station receives a beacon frame transmitted by the access point indicating a beginning of a first period during which the first station is not allowed to contend for medium access, the first period followed by a contention period during which the first station is allowed to contend for medium access, the beacon frame also indicating a location of a contention sub-period within the first period during which the second station is enabled to transmit data according to the second modulation scheme and following a distributed coordination function access mechanism.